

# Field-Feeding & Advanced Sustainment Technology (FAST)



Field-Feeding and Advanced Sustainment Technology (FAST) will minimize manpower, equipment, and consumables (fuel and water), and substantially reduce both the transportation and deployable logistics footprint and enhance the quality of food service.

## Why is it Needed?

There is a critical need to significantly reduce the weight, cube, and logistics support of combat field feeding systems. Instead of military unique appliances and thermodynamically limited burners and generators, a central heater with cogenerator efficiency produces heat and electric power that enables the use of high capacity commercial appliances, heat-driven refrigeration, integrated sanitation, and grey water recycling. This totally integrated system will reduce fuel and water consumption by 50% and the logistics footprint in comparison to current systems by up to 75%. FAST technology will transition to the Army Battlefield Kitchen for use in Objective Force Maneuver Sustainment at the Mission Staging Site and Unit of Employment.

## **Technology:**

FAST incorporates advanced thermal fluid and cogeneration technologies. The use of thermal fluid increases the combustion efficiency from 25% (using open flame) to 75% with this closed system. Cogeneration is the production of two forms of energy from one process to maximize the overall efficiency of the system by converting waste heat to stored electrical power.

# Key Features / Benefits:

Reductions in required manpower, weight, cube, and logistical support will provide comparable throughput rates (500+ warfighters/ meal) while enhancing food quality and

operating environment. The use of commercial food service equipment will reduce total life cycle costs. Cogeneration technology is beginning to transfer to the commercial market.

### Point of Contact:

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